

# CODE APARTMENTS

"We can "value add" to your project with our knowledge, experience, expertise, good reputation and extensive list of contacts. This process includes providing alternative design and material selection that provide savings or improve the functionality without additional cost."

- GLENZEIL PTY LTD'S, MATT SKRINIS



Left The refreshing lap pool creates a tranquil escape.

## THE GLENZEIL CODE

The quality of finish on every project is of the highest standard, something Glenzeil has been recognised for by clients and industry professionals alike, with multiple awards for quality received.

CODE APARTMENTS / GLENZEIL

Hard rock and harsh weather challenged their works programme, yet Glenzeil completed Code Apartments safely and on time by using innovative construction methods and materials. Constructed for Chrome Properties in inner Brisbane's Bowen Hills, Code is a ten storey residential development comprising 132 apartments, SKYDECK roof garden, theatre room, lap pool, gymnasium and basement car parking.

Glenzeil started the 74 week construction programme in April 2010, and unforeseen challenges during the early works soon put the pressure on. The double basement excavation took six weeks longer than predicted, due to the "Brisbane Tuff" rock identified during geotechnical investigations. This was to be broken by 70 tonne machines and bulk excavated, a process which took longer than the civil contractor expected. In addition, shoring walls and inclement weather slowed progress, putting pressure on Glenzeil to redeem the weeks lost in the basement by speeding up the structure.

Inclement weather continued to impact on the progress of the actual structure, with 48.5 days of unworkable weather in total amounting to a significant proportion of the overall project timeframe. Glenzeil responded by speeding up the finishing trade sequencing throughout the typical floors to accelerate the programme.

The formwork system that was used was called the "Ischebeck" system, which offered benefits including better speed compared to conventional formwork.

"This system enabled us to speed up our typical slabs by starting finishes 3 floors below the working deck opposed to conventional formwork which only allows you to start finishes 5 floors below the working deck. With the stripping process quicker as well this gave us some of the time needed to speed the structure up," said Glenzeil Pty Ltd's, Matt Skrinis.

"Typical slab turnaround was 12 days from formwork to pour stage.

"The building structure along the western elevation had a very intricate layout with juxtaposed sunhoods projected alternatively level by level as the building went up for the aesthetic appearance. This took a great deal of management and set out time for the formwork contractor and constant rearranging of scaffold for edge protection.

"The introduction of precast panels for the external walls and large majority of inter tenancy walls in lieu of blockwork was a key in accelerating the structure. Using double story precast panels and balcony hobs meant our slab turnaround time improved and our contractors could sequence their works. The remaining inter

tenancy walls were constructed with the "Eureka Wall System" for acoustic and speed related reasons."

A team of nine Glenzeil staff comprising Project Manager, Site Manager, 2 Contracts Administrators, Structural Foreman, Finishing Foreman, WHSO, Building Cadet and Administration Clerk worked with 38 subcontractors to construct Code, and succeeded in delivering the apartments LTI-free.

Glenzeil prides themselves on their high commitment to safety onsite and the quality of finish they produce when delivering a project back to the client. Across the company the primary responsibility onsite is to maintain a safe working environment for the workers and the public by keeping incidents and accidents from occurring.

The quality of finish on every project is of the highest standard, something Glenzeil has been recognised for by clients and industry professionals alike, with multiple awards for quality received.

"We can "value add" to your project with our knowledge, experience, expertise, good reputation and extensive list of contacts. This process includes providing alternative design and material selection that provide savings or improve the functionality without additional cost," said Matt.

"Our consultants, project managers and trades will review and comment, to offer the best outcome in both design and cost."

Glenzeil has completed construction projects including offices, industrial, community facilities, high rise and low rise units, health facilities, shopping centres, retirement villages, hotels, casinos, schools, universities, fit out and specialist buildings in both Queensland and New South Wales.

Recent major projects include the \$50 million Nirvana by the Sea 15 story high rise luxury beach front apartments at Kirra Beach Gold Coast, which won a Master Builder Award; The Rocket 16 story high rise commercial office building in Robina; H20 @ Varsity, 60 low rise river dwellings at Varsity Lakes, Gold Coast, also a Master Builder Award winner; and Brisbane's Joint Contact Centre, which received the highest Green Star rating for a office building in Australia and won a Master Builder Award.

Current projects include Robina Health Precinct, Serene On Tweed Retirement Living development, Lismore Heritage Motel and Jupiters Casino Theatre Refurbishment.

**For more information contact Glenzeil Pty Ltd**, Gold Coast Office phone 07 5555 3333, Rockhampton Office phone 07 4962 5010, email: [mail@glenzeil.com.au](mailto:mail@glenzeil.com.au), website: [www.glenzeil.com.au](http://www.glenzeil.com.au).



**Part of ensuring residents and guests at Code Apartments** enjoy a beautiful lifestyle is getting all the details exactly right. Otis Elevator Company have played an important part, by working with Glenziel to value engineer a solution for the elevators for the ten storey apartment building. Otis lead the way in the field, and have given Code the best products available, with two GeN2® elevators with custom interiors now giving people high speed access to every floor with maximum comfort and minimum energy use.

Otis applied themselves to the project for twelve months from tender to practical completion, with a team comprising sales engineer, project manager and installation crew including an Adjusting engineer completing the various stages from design through to commissioning.

“We exceeded the builder’s expectations with the program in terms of delivery, installation time and handover of builders’ lifts. Through our experience we were able to offer a solution that saved both time and money whilst still achieving the design intent,” said Otis spokesman, Anthony Seddon.

“Otis use an installation method that does not require shaft scaffolding, making it faster and more cost effective to install.”

“Glenziel are a repeat Otis customer, we have completed numerous projects with them over the years, including Nirvana by the Sea which has three GeN2® elevators, and recently other projects in the Robina residential and commercial sectors.”

The environmentally-sensitive GeN2® system installed for Glenziel at Code establishes new

standards for lift performance, reliability and design flexibility. At Code, this flexibility translated into custom interiors which feature LED lighting. LED lighting enhances energy efficiency and last up to up to ten times longer than conventional fluorescent lamps and besides saving costs; this also reduces downtime for maintenance. When there’s no passenger demand an automatic switch-off mode offers further energy savings.

But it is what the residents don’t see which really makes the GeN2® the new state-of-the-art. They use smooth, polyurethane-coated steel belts instead of cables, giving a smoother ride and vastly reduced maintenance issues. The drive mechanism is a low inertia gearless machine with sealed-for-life bearings which never requires any form of polluting lubricants and is equipped with a highly efficient Permanent Magnet synchronous motor of radial construction.

The result is an elevator which is up to 10% more efficient than conventional gearless machines with induction asynchronous motors and 15% more efficient than other machines with Permanent Magnet motors of axial construction design.

Energy efficiency is even further improved through Otis’ Regen™ drive system, which feeds energy generated by the lifts’ motion back into the building grid for the use of other loads connected to the same network. These combined technologies can deliver energy savings of up to 75%.

What residents will notice is the quieter, smoother ride; outstanding stopping accuracy; faster and jolt-free lift acceleration and deceleration with advance opening and closing

of the doors so everyone gets where they are going more efficiently.

In terms of safety and reliability, this is the gold standard. Otis’ patented PULSE® system continually monitors the status of the belt’s steel cords so enhancing both their lifetime and their reliability. And with the optional Otis Elite® service, customers enjoy a priority service that radically improves both lift reliability and passenger reassurance with remote monitoring of lifts ensuring swift response to any need for repairs or maintenance.

The GeN2® has enviable certifications, meeting ISO9001 and possessing the VDI 4707 A rating, the highest global rating for elevator energy efficiency. The factory manufacturing these elevators is also the world’s first Gold LEED (internationally-recognized green building certification system) certified factory.

GeN2®elevators are also uniquely suited to refurbishments and Building Code Australia-related upgrades due to the installation not requiring any scaffolding, an especially valuable benefit in tenanted spaces where work needs to proceed in minimum space with maximum safety. For retrofit and renovation projects where improving energy efficiency is one of the primary goals, the GeN2 offers a simple solution which minimises constructability issues due to Otis’ ability to customise car dimensions to suit the existing lift cores.

“Otis is not only market leader in large high rise offices, we also are very successful and competitive in smaller buildings such as apartments. Our range of offerings designed specifically for smaller projects are competitively priced, environmentally friendly, fast to install and of very high quality,” said Anthony.

“The Otis design philosophy applied in high rise lifts flows across the entire range. We leverage technology to deliver best in class service.

“Otis is the founder of the safety elevator, and we were one of the first companies to include regenerative drives across the range as standard. We have a complete design, install and service team and the experience, knowledge and product range to assist in developing optimal solutions for any project.”

**For more information contact Otis Elevator Company Pty Ltd**, Units 1-3, 5-9 Ricketty Street Mascot NSW 2020, phone 02 8338 2700, website: [www.otis.com](http://www.otis.com).



**Below** Living 4 Landscapes adds natural beauty to Code Apartments.

**Below** Total Coastal Constructions were responsible for all the structural concrete work, including ten floor decks, three levels of basement, the roof and all columns.



**Living 4 Landscapes** gave Code Apartments the essential touch of the tropics by constructing the street level gardens, pool area landscaping and a rooftop BBQ area planting for the project. In keeping with the new water-wise approach, they also installed an inconspicuous water-efficient drip-feed irrigation which is fed from harvested rainwater stored in three sub surface rain tanks.

The landscaping is contained in planter boxes with block retaining walls, which are of substantial dimensions, with a total of 250m<sup>2</sup> of garden created surrounding the apartments. The site tower crane had to be used for the installation of the rooftop plantings, and a mobile crane for the mature trees including Dragon Tree and Frangipani which are a feature of the pool area. All the plants specified for the project are drought hardy varieties. This was the first major CBD project for Living 4 Landscapes, and is a stylish showcase of the company's skills. Founder, Brad Fisher has been in the landscaping trade for 18 years, and has in six years grown his company from small domestic jobs to one with ten employees undertaking work including large scale commercial projects, multi-million dollar residential projects, BER projects and both state and local government projects.

The efficiency with which they approach jobs is remarkable, with the entire Code landscaping scope of works completed within three weeks.

"We do the majority of Glenzeil's work," said Living 4 Landscapes founder, Brad Fisher. They are great to work for, and over the last four years we have developed working relationship which is strengthened by the continuity of our teams working together.

"Living 4 Landscapes is a family business. My wife Emma manages all the administrative side of things.

"I am currently grooming my twelve month daughter Elke to take over the business one day— she was born with a shovel in her hand," Brad mentions candidly.

Living 4 Landscapes undertake both hard and soft landscape design and construction, including timber decks, paths and paving works for projects throughout South East Queensland and the Tweed/Byron Bay region. They specialise in creating gardens which are drought tolerant, water-efficient and low maintenance, and have a progressive approach to creating the living elements which add natural beauty to the built environment.

*For more information contact Living 4 Landscapes, PO Box 6622 Broadbeach QLD 4218, mobile 0424 807 107, email: brad@living4landscapes.com.au, website: www.living4landscapes.com.au*

**Total Coastal Constructions (TCC)** deliver exactly what the company name promises – completion of all the concrete construction elements of a project. And Code Apartments is an excellent example of the kind of quality results they achieve.

TCC did all the structural concrete work, including ten floor decks, three levels of basement, the roof and all columns. In total, they placed and finished approximately 11,000m<sup>2</sup> of Hymix 40 mpa concrete.

A conventional formwork system was used, with a 48 metre boom pump from Classic Concrete Pumping used for placement. TCC's crew also did all the steel fixing and placement of reinforcing.

A crew of between four and ten TCC workers put in a combined total of approximately 5,000 man hours on the job, succeeding in meeting construction milestones while maintaining an excellent safety record and quality outcomes.

The challenges of the project for TCC included numerous step downs in the decks requiring accuracy and an eye for detail in placement of formwork and reinforcing. The project was also constructed on a tight program. TCC had between seven and nine days between each slab

pour for completing formwork and steel fixing, and needed to manage supply of materials and concrete accordingly.

"The Code Apartments project was very well organised and run by a very professional construction team," said TCC Spokesman, Shane Bru.

TCC have been in business for four years, providing all aspects of concrete construction and steel fixing throughout South East Queensland and Northern New South Wales. The company has five full time and six part-time staff, all committed to delivering the highest quality results for projects in a timely and safety-conscious manner.

Whatever a project's architectural challenges, if there's concrete construction involved, TCC can help turn the designer's ideas into a built reality.

*For more information contact Total Coastal Constructions p/l, Shane Bru, mobile 0429 656 679, email: skbru2@bigpond.com.au.*

**Below** The lifting equipment supplied by Lindores Construction Logistics on Code Apartments required a high level of skill and good management.



**Below** Urban Strategies breaks new ground with Code Apartments.



Authority. A unique part of the process includes ULDA representatives who are highly experienced in the development field and hence have 'real world' experience. Another key aspect is ULDA accepting engineering certification from certain consultants that the 'as built' development will comply with engineering standards. This certification negated the need for lengthy assessment of technical reports.

Urban Strategies' tasks included close liaison with ULDA and the project team, assessing various iterations of the design concepts, and providing town planning rationale for the development. These responsibilities are a core element of Urban Strategies capabilities and business expertise, as specialists in providing strategic and statutory town planning advice to the private and public sector alike.

Other major projects that the company has recently project managed through the complex town planning process have included The Montague at West End; The Capital at South Brisbane; Aquila and Gleneagles at New Farm; Melba at Fortitude Valley; and Chalk at Woolloongabba.

"A key plank of Urban Strategies' work protocol is to identify opportunities and constraints of the development site early in the planning process, working hand in hand with the client and a wide range of specialist consultants," said Director, Lochlan Mummery.

"By keeping true to this practice, Urban Strategies has won the trust of those we consult for, who in return have become regular and valued clients.

"We can assist with any queries regarding town planning matters, regardless of how large or small."

*For more information contact Urban Strategies Pty Ltd, PO Box 3368 South Brisbane QLD 4101, phone 07 3360 4200, fax 07 3360 4260, email: l.mummery@urbanstrategies.com.au, website: www.urbanstrategies.com.au.*

Lindores Construction Logistics supplied Code Apartments with lifting equipment and manpower which helped get the project built safely and smoothly. Lindores supplied Glenzell with a Favelle Favco 1000e MK11 14 tower free-stand crane with 45 metres of boom; 50t slew cranes; multiple 20t and 25t frannas; a single car alimak 20/32 hoist; and a dedicated crew of three men on the tower crane and flexible crewing for the mobile cranes.

Because the Code project involved the installation of large precast concrete panels, Lindores ensured the crane they supplied had the right jib length to provide maximum lifting capacity and a good coverage of the site. As the site was on a tight street, the erection and dismantling of the tower crane was quite challenging from a logistics and safety perspective, requiring a high level of skill and good management. Lindores provide both wet and dry hires for short or long term assignments, and have a fleet of lifting plant which includes new high speed Favelle Favcos, new electric Comedils and Liebhers, and the latest technology franna type cranes. They do all types of specialist rigging, provide transport solutions, and have a highly skilled team of operators, riggers and dogman. All equipment is regularly serviced, and both scheduled and unscheduled maintenance attended to promptly.

Other major projects the company has been working on include King George Central, for which Lindores purchased a brand new specially

made Favelle Favco M220DX with a winch speed that is the fastest in the country, and the large engine and specially designed hydraulic pumps that were required for the heavy lifts and height on the job.

For the BPMX Wintergarden project, Lindores erected a Favelle M380D sitting on top of a 9 storey carpark which they designed on a specialty grillage bolted to the carpark. For BPMX Promenade, they supplied a liebherr 280ECH with a 60m freestand height, the height of a 15 storey building. Lindores are also supplying the cranes for the Devine Hamilton harbour project.

With wide experience in projects across the industry, Lindores ensure they provide solutions which are ideal for a project's lifting requirements. "We have first class, highly experienced management teams with outstanding crews," said Lindores Construction Logistics spokesman, Chris Lindores. "We have over 12 years in the tower crane and construction industry and crane crews with over 30 years experience, all put together in an unstoppable team environment."

*For more information contact Lindores Construction Logistics, phone 07 5593 8440, fax 07 5593 7440, email: info@lcllogistics.com.au, website: www.lcllogistics.com.au.*

Urban Strategies was part of the team that ensured swift approval for the Code multi level residential development at Bowen Hills. As the town planning consultants for the project, Urban Strategies Director Lochlan Mummery and Senior Town Planner Anna Barker broke new ground with their involvement, when Code became the first development application to be lodged in the Bowen Hills Urban Development Area (UDA), under the auspices of the State Government's Urban Land Development Authority (ULDA).

The ULDA is the vehicle created by the Queensland State Government which provides unique opportunities to 'fast track' major development applications in certain strategic locations around the State. The approval process is undertaken by the ULDA in a collaborative fashion with developers and their consultants, and is a progress-friendly approach to the town planning approval process. Rather than having to run the gauntlet of the traditional confrontational planning assessment procedure, the Code consultant team liaised closely with the ULDA team prior to lodgement, to work through the proposed plans and specific design issues.

The ultimate outcome was lodgement of an application that could be approved in a matter of weeks, rather than many months as typically experienced with an application of this type being assessed by a Local





Code Apartments, QLD

Below Wastech ensured the best possible system for rubbish and recycling disposal has been built in to the apartment complex.

**brilliant chute solutions**

Wouldn't it be brilliant to have an internal finish that features 80% less friction than steel - creating a quieter and smoother flow? Easy. Smoothtubes can be used for waste, linen and as a recycling chute. They offer a clever choice for anyone that prefers a greener and more hygienic alternative. Want to save on installation time and costs? The smart money is on Smoothtubes. Wastech's revolutionary Smoothtubes, helping you look brilliant.

PRODUCTS & SOLUTIONS FOR THE RECYCLING & WASTE INDUSTRIES. FREE CALL 1800 465 465 [WASTECH.COM.AU](http://WASTECH.COM.AU)

**WASTECH**  
ENGINEERING



Science has made bin night a thing of the past for residents of Code Apartments. From the early design stages of the project, the architect wanted an easy, green and efficient way for residents to manage their waste. As the industry leaders in sustainable waste management systems, Wastech ensured the best possible system for rubbish and recycling disposal has been built in to the apartment complex.

Part of the design brief was that management of garbage and recycling be an automatic function within the site. So Wastech supplied and installed their Smoothtubes Garbage Chutes and an Ecopac compactor with a carousel for automatic bin changing. The Smoothtubes are a virtually noiseless rubbish chute, and extremely low maintenance. They don't clang, bang or smell, and the design ensures everything moves through efficiently, every time.

Wastech worked closely with both the architect and the builder, Glenziel. Offering far more than just great products, Wastech has the experience to deliver early design input for architects, offering layouts that are site specific in CAD.

Working closely with builders, they provide a fast and efficient installation and commissioning, which is then backed up with a level of post-installation service that is unique – 24/7 every day of the year,

Wastech are there for customers and the end users of their systems. Wastech also undertake formal waste management planning and reporting, training of waste system operators and after sales maintenance

Wastech has worked extensively in Queensland, with recent major projects also including Soul, Waterfront, Portside. Wastech has several teams of installers in Queensland to cover all along the coast and Brisbane. The Smoothtubes products are particularly sought after for projects in tropical areas due to their material composition, which is corrosion-proof in hot, humid salt-laden air. And of course, the lack of whiff in an environment so conducive to waste fermentation is a real plus too.

Smoothtubes are an Australian innovation, and have been certified as meeting the requirements of green projects. Wastech not only supply and install their state-of-the-art systems in major projects throughout Australia, they also export to Dubai, Malaysia and Singapore. When it comes to management of life's leftovers and litter, Wastech deliver the innovation which sorts everything out in the greenest, cleanest, simplest and most scientific way.

For more information contact Wastech Engineering Pty Ltd, Valerie Collins, phone 03 8787 1600, email: [sales@wastech.com.au](mailto:sales@wastech.com.au), website: [www.wastech.com.au](http://www.wastech.com.au).